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Oregon

DEPARTMENT OF
STATE POLICE

March 10, 1993

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GENERAL
HEADQUARTERS

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

File: 002.41

Ms. Donna Searcy, Secretary
Federal Communications Commission
1919 M. Street Suite 222
Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

BEFORE

FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20544

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MAR 19 1993

FCC MAIL ROOM

In the Matter of:

Replacement of Part 90 by
Part 88 to revise the private
land mobile radio services and
modify the policies governing
them.

DOCKET NUMBER 92-235

TO: The Commission

COMMENTS OF THE STATE OF OREGON

DEPARTMENT OF STATE POLICE

March 10, 1993

MAR 19 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

The Oregon State Police is a statewide organization responsible for the enforcement of traffic, fish and wildlife, and criminal laws within the State of Oregon.

The Oregon State Police has been migrating from an old low band system, with inadequate coverage, to a statewide VHF high band system. This system is designed using down-tilt and directional antennas, coupled with forty watt mobile radios, to maintain coverage within the desired patrol area. A recent action by the Oregon Occupational Health and Safety Division compelled our

It is from this position that the Oregon State Police provides the following comments and suggestions regarding docket 92-235.

GENERAL COMMENTS

On page one, section two, of the introduction, it is stated in essence, that without the proposed changes private land mobile radio will deteriorate to the point of endangering public safety and the national economy.

The sweeping changes proposed will cost the private and public sector hundreds of billions of dollars to replace the level of radio communications they currently have. This would be required at a time when the economy is slow and state and local government budgets are strapped for funds. The effect, over a rather short term, would be the diversion of money that should be spent on police, fire, and emergency medical services to new equipment mandated by federal regulations.

Without destroying current networks, changes can be made that will increase the number of channels in the VHF high band and UHF bands. These changes, coupled with increased use of the 800 MHZ band in metropolitan areas, new allocations at 220 MHZ, PCN/PCS technology, and mobile satellite technology, should meet the communications needs of rural states well into the next century.

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The commission should closely evaluate the cost benefit in each

~~state action to implement these changes. We suggest that~~

SPECIFIC COMMENTS

REDUCED POWER AND DEVIATION IN 1996

This will negatively impact the safety of our officers and the public by:


- a. Reducing the coverage of our statewide radio system.
- b. Reducing the recovered audio in our mobile and portable radios making it difficult for officers to hear dispatch in noisy environments.
- c. Interfere with the proper operation of voice encryption systems, utilized in critical enforcement situations.
- d. Reduce the reliability of tone squelch decoders used throughout our system, and increase the possibility of "lost communications" during life threatening situations.
- e. Increase the likelihood of interference by using zero mileage spacing between adjacent channel users without improved receivers.

RECOMMENDATION:

The Oregon State Police recommends that the 1996 changes be delayed until at least 2004. At that time a channel plan should be introduced that uses 12.5 Khz channel spacing in both the VHF and

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UHF bands. By using the same channel spacing in both VHF and UHF bands, equipment costs will be minimized and manufacturers will be able to provide equipment that incorporates the quality of communications demanded by PUBLIC SAFETY. This will also allow state and local government in Oregon time to plan for an orderly migration with minimum impact. Further reductions in channel spacing below 12.5 Khz should not be mandated in rural states until a documented need for additional PUBLIC SAFETY channels in the VHF and UHF bands is established on a state by state basis. Any spacing plan must be fully compatible with APCO project 25



This engineering documentation should show a design that maximizes the use of down-tilt and/or directional antenna arrays, proper transmitter site location, and the minimum transmitter power needed to meet coverage criteria. Mobile radio ERP should also be restricted to the power level needed to meet coverage criteria. The documentation should be reviewed, and approved, by a regional planning committee and/or authorized frequency coordinator prior to submission to the commission.

To insure that stations are constructed as approved, the commission should require certification by a qualified engineer after construction is completed.

To insure that stations are not modified after construction and operated within the parameters of the license, the commission should reinstate the requirement for licensed technicians in the Public Safety radio service.

This approach will lead to the efficient utilization of spectrum and reduce interference between systems without imposing serious financial burdens on PUBLIC SAFETY providers.

CHANNEL ASSIGNMENT PROPOSAL

The proposed interspersing of SMR operations with PUBLIC SAFETY allocations will lead to increased interference. This is due to the fact that many PUBLIC SAFETY sites are co-located with commercial sites.

RECOMMENDATION:

The Oregon State Police recommends that PUBLIC SAFETY retain block allocations of spectrum in the VHF and UHF bands. PUBLIC SAFETY allocations must be protected from private sector raiding by only allowing qualified PUBLIC SAFETY providers to hold licenses in the PUBLIC SAFETY radio service. Block allocations will allow PUBLIC SAFETY to take advantage of future technology breakthroughs such as high speed data for photo imaging, fingerprint transmission, compressed video, and TDMA.

Only through block allocations can the necessary bandwidth be provided for these applications. In addition PUBLIC SAFETY should retain at least as large a percentage of total available channels in VHF and UHF as is currently occupied.

MOBILE RELAY OPERATION

The Oregon State Police operates over wide areas in rugged terrain. Officers must be able to directly communicate from mobile to mobile or portable to portable over wide areas. This can only be attained through the use of full duplex base stations operating in the mobile relay mode (receiver voting/transmitter steering or simulcast).

RECOMMENDATION:

The Oregon State Police recommends that PUBLIC SAFETY be allowed

mobile relay operation in all bands. In addition any frequency plan must allow for proper transmitter to receiver spacing so this mode of operation is not impeded.

SECONDARY SIGNALING (PAGING, ETC)

The proposed regulations appear to restrict the ability of PUBLIC SAFETY to use secondary signaling on VHF and UHF channels. The Oregon State Police uses paging, on a secondary basis, in areas where commercial paging is not available or coverage is unacceptable.

RECOMMENDATION:

The Oregon State Police recommends that secondary signaling and paging continue to be allowed in all bands.

In summary, the changes the commission proposes in Oregon, will have major economic, environmental, and officer safety impacts. Your consideration of our concerns and recommendations is appreciated.